

## REMARKS

Reconsideration and allowance of the present application are respectfully requested. Claims 1-44 and 48-51 remain pending in the application. By this Amendment, claims 1 and 7 are amended. No new matter is added.

Applicants note with appreciation the Examiner's indication on pages 10-12 of the Office Action that claims 13-44 and 48 are allowed.

In numbered paragraph 4, pages 2-10 of the Office Action, claims 1-12 and 49-51 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 7,024,695 to (Kumar et al.) in view of U.S. Patent No. 7,363,500 to (Funk) and further in view of U.S. 2004/0078571 (Haverinen). This rejection is respectfully traversed.

As exemplified in Fig. 2, an exemplary reconnect procedure is based on a credential (e.g., lines 1 and 2 of paragraph {0024}). For example, in step 202, a server computer 14 issues a credential. As exemplified in Fig. 2, the connection between the server computer 14 and the client computer 12 is terminated in step 204 (e.g., lines 1-4 of paragraph {0026}). In order to reconnect, the client computer 12 transmits the credential to the server computer 14 in step 206. In step 208, the process of authenticating the client computer 12 and server computer 14 with the credential issued from step 202 is performed (e.g., lines 5-8 of paragraph {0024}).

Further, Applicants have discussed of record that in step 312, a server computer 14 transmits the session information (sessioninfo), seed (s), maximum times (m) to run the hash function, the expiration time (exp), and the credential (cred) encrypted by the initial session key (k1) to the client computer 12 in order to issue the credential (e.g., specification at paragraph [0025]).



The foregoing features are broadly encompassed by claim 1, which recites a method for authenticating a computing device, including among other features, issuing a credential based on session information, a hash seed, a maximum iterative value, credential information and an expiration time from a first computing device to a second computing device; upon a loss of connection, transmitting said credential and a computer challenge from the second computing device to the first computing device; transmitting a response to said computer challenge from said first computing device to said second computing device; and verifying said response with said second computing device in order to authenticate and verify said computing devices and re-establish said connection.

Please note that the aforementioned "loss of connection" feature as amended in claims 1 and 7 is a mere incorporation of a restatement of the "connection....being terminated" feature as previously presented in claim 49. Accordingly, Applicants respectfully submit that the current amendment to claims 1 and 7 does not present any new issue, but is a mere restatement of a feature as previously presented in claim 49.

On page 3 of the Office Action, the Examiner asserts that the Kumar et al. patent discloses "transmitting said credential and a computer challenge from the second [computer] computing device to the first [computer] computing device when the second computing device is to be authenticated." Applicants respectfully disagree with the Examiner's conclusion. The Kumar et al. patent discloses a Challenge Handshake Authentication Protocol based on a challenge-response verification (col. 5, lines 2-14; col. 6, lines 45-65; and Fig. 5). However, the Kumar et al. disclosures that the Examiner relies upon are merely indicative of an exemplary



authentication protocol as shown in Fig. 5, but the Kumar et al. patent does not mention specifically transmitting a credential upon a loss of connection. Further, the Examiner admits on page 3 of the Office Action that "Kumar does not explicitly disclose credential based on a maximum iterative value security parameters."

At least for these reasons, the Kumar et al. patent would not have taught the features of claim 1, including the recited features of issuing a credential based on session information, a hash seed, a maximum iterative value, credential information and an expiration time from a first computing device to a second computing device; upon a loss of connection, transmitting said credential and a computer challenge from the second computing device to the first computing device; transmitting a response to said computer challenge from said first computing device to said second computing device; and verifying said response with said second computing device in order to authenticate and verify said computing devices and re-establish said connection. Claims 7 and 49 variously recite similar functional features.

The Funk patent does not cure the deficiencies of the Kumar et al. patent. The Funk patent was apparently applied by the Examiner for its various disclosures of MD5 iterative algorithm that applies a hash function (col. 4, lines 10-24; col. 7, lines 36-42; and col. 18, lines 35-65). But this and other related Funk patent disclosures are in the context of preventing attacks on a communication network, and do not relate to authenticating a computing device for the purpose of re-establishing a connection. Further, these disclosures are not on point as to the Applicants' claimed features relating to issuing a credential based on session information, a hash seed, a maximum iterative value, credential information and an expiration time from a first computing device to a second computing device.



These and other disclosures of the Funk patent that the Examiner relies upon would not have taught or suggested specifically, among other recited features, issuing a credential based on session information, a hash seed, a maximum iterative value, credential information and an expiration time from a first computing device to a second computing device; upon a loss of connection, transmitting said credential and a computer challenge from the second computing device to the first computing device; transmitting a response to said computer challenge from said first computing device to said second computing device; and verifying said response with said second computing device in order to authenticate and verify said computing devices and re-establish said connection, as recited in claim 1, and as similarly recited in claims 7 and 49.

The Haverinen publication does not cure the deficiencies of the Kumar et al. patent and the Funk patent. In rejecting claim 1, the Haverinen publication was apparently applied by the Examiner on page 4 of the Office Action for its disclosure of a client request to an authentication server for a ticket deemed valid for the duration of a user logon session (e.g., paragraphs [0011], [0012] and [0022]). The Haverinen publication further discloses start time, expiration time and renewal time of the ticket (e.g., paragraph [0035]). However, there is no mention of a first computing device issuing a credential, losing a connection and transmitting said credential and a computer challenge from the second computing device to the first computing device. These specific events as encompassed by Applicants' claim 1 are meant to verify a resulting response with said second computing device in order to authenticate and verify said computing devices and re-establish said connection, as recited in claim 1, and as similarly recited in claims 7 and 49.



For at least these reasons, Applicants' claims 1, 7 and 49 are allowable. Claims 13-44 and 48 were indicated as being allowed. The remaining rejected claims depend from the respective independent claim, and recite additional advantageous features which further distinguish over the documents relied upon by the Examiner. As such, the present application is in condition for allowance.

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice of Allowance is respectfully solicited.

In the event that there are any questions concerning this paper, or the application in general, the Examiner is respectfully urged to telephone Applicants' undersigned representative so that prosecution of the application may be expedited.

Respectfully submitted,

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